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PREDICTION OF FLASHOVER VOLTAGE OF 11kV SILICONE RUBBER INSULATOR UNDER CONTAMINATED CONDITIONS

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Abstract

In this paper a mathematical model that computes the flashover voltage of 11kV silicone rubber insulator (SIR) energized with AC voltage is presented. The salient feature of this model is that it takes in to account geometrical parameters of insulator such as form factor. As a first step, experiments are conducted on artificially polluted 11kV silicone rubber insulator for different Equivalent Salt Deposit Density (ESDD) levels. The validity of the model was verified by comparing the computed results with the experimental results and good correlation has been shown.

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